ISD NEWS AND VIEWS

A PUBLICATION OF THE INFORMATION CENTER BUREAU

MONTANA DEPARTMENT OF ADMINISTRATION

INFORMATION SERVICES DIVISION

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MAINFRAME SECTION

NEW MICROWAVE SYSTEM

ISD'S Telecommunications Bureau recently awarded Mountain
Bell a contract for the installation of a microwave comm-
unications system. This new system will provide direct
communication capability between the Mitchell Building and
the armory (the Justice Network). In addition to saving a
substantial amount of money, this equipment will allow ISD to
transmit data at much higher speeds than before.

The first phase of system installation is scheduled to be
done by May 1, 1986 and the final phase completed by July 1,
1986. This is ISD's first attempt at high speed data
communications (56K BPS) and, if successful, we may be
providing this service to other locations in the near future.

If you have a need for high speed data communications or if
you have questions, call Dennis Sheline at 444-2869.

INFORMATION SERVICES DIVISION SOFTWARE SUPPORT GUIDELINES

PURPOSE/SCOPE
Software Support Guidelines provide general direction to
Information Services Division's software support activities
and aid user product selection decisions. These guidelines
apply to all software support activities for products which
are available to end users. Biannual revisions will be
published.

GENERAL SUPPORT CONCEPT
Each end user software product supported by ISD has been
assigned a support level. Four levels of software support
are provided. Product support activities will evolve so that
actual support activities reflect the support level assigned.
New products acquired will be reviewed to determine appropri-
ate support levels.

SUPPORT LEVELS

1. FULL SUPPORT includes:

     o Maintain a Vendor Supported Release
     o Monitor and Maintain Performance
     o Provide User Education
     o Document Standards, Procedures, and Guidelines
     o Maintain Technical Expertise
     o Assure System Compatibility
     o Assist in Problem Resolution

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MAINFRAME SOFTWARE PRODUCTS  (Full Support)
    ACF/2-Access Control Facility/2
    ADS/O-Application Development System/Online
    ASSEMBLER H V2
    ASSEMBLER F
    ATMS III-Advanced Text Management System III
    BMS-GT (to be installed in the near future)
    BTP-Batch Transfer Program
    CAPEX OPTIMIZER
    CICS-Customer Information Control System
    COBOL
    CULPRIT
    DCF-Document Composition Facility
    DISOSS (V3)
    DLF-Document Library Facility
    DYLDOC
    DYLSORT
    DYL260
    EasyPROCLIB
    FORTRAN VS
    IDD-Integrated Data Dictionary
    IDMS/CV-Integrated Data Management System/Central Version
    INTERTEST
    ISPF/PDF-Interactive System Productivity Facility
    OLQ-Online Query
    PANVALET
    PANVALET/TSO
    PL/1 OPTIMIZER
    SAS-Statistical Analysis System
    SDSF-Spool Display and Search Facility
    SYNCSORT
    TMS-Tape Management System
    TSO-Time Sharing Option
    UCF-Universal Communications Facility
    VPS-VTAM Printer Support
    VSAM-Virtual Sequential Access Method

MICROCOMPUTER SOFTWARE PRODUCTS (FULL SUPPORT)
    CROSSTALK XVI
    Display Write III
    LOTUS 1-2-3
    WordPerfect

2. LIMITED SUPPORT includes:
    o Maintain a Vendor Supported Release if possible
    o Provide Limited User Education
    o Assure System Compatibility within Time and Resource
      Constraints
    o Assist  in Problem Resolution within Time and Resource
      Constraints
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MAINFRAME SOFTWARE PRODUCTS (Limited Support)
   BASIC (VS)
   CICS/SYSD-Debugging Tool
   ICIDU-Diskette Reader
   IIPS-Interactive Instructional Presentation System
   PC/70
   TYPESET II
   ZCHART
   ZETA FUNDAMENTAL SUBROUTINES
   ZETA FUNCTIONAL SUBROUTINES

MICROCOMPUTER SOFTWARE PRODUCTS (Limited Support)
   PFS: File and Report

3.   MINIMAL SUPPORT includes:
   o Periodic Review for Software Disposal
   o No Assurance of Vendor Supported Release
   o No User Education
   o No Assurance of System Compatibility
   o No Problem Resolution Assistance
   o Provide Installation Assistance within Time and
        Resource Constraints
   o May Charge Using Agencies for License and Maintenance
        Fees

MAINFRAME SOFTWARE PRODUCTS (Minimal Support)
      ALPHA SEARCH
      DITTO/OS
      FORTRAN G
      ISAM-Indexed Sequential Access Method
      TPL-Table Producing Language

4. SUNSET SUPPORT includes:
      o Plan for Software Disposal

   SOFTWARE PRODUCTS (Sunset Support)
      DAS (DATA ADMIN)-Flowcharting Tool (no replacement)
      DYL250 (replaced by DYL260)
      MARKIV
      MEGACALC (to be replaced by Lotus and SAS/FSP)
      MSUSTAT (replaced by SAS)
      SPSS-Statistical Package for Social Services (to be
        replaced by SAS)

Questions on the Software Support Guidelines can be directed
to Jeff Brandt at 444-3987 or Amy Palmer at 444-2868.

MEGACALC REMOVAL REMINDER

Effective June 1, 1986, MEGACALC will no longer be available. A class for converting MEGACALC spreadsheets to LOTUS 1-2-3 has been scheduled for April 24, 1986. Refer to the class schedule for details.

SAS PROBLEM

A serious problem has been found in the production release 5.08 of the SAS System which can produce wrong results without warning in the five statistical procedures noted below.

If you use BY groups with any of the five procedures (CANCORR, FACTOR, PRINCOMP, RSQUARE, VARCLUS), the results produced from all but the first BY group will be incorrect. The problem results from a subroutine failing to zero out the last row of the matrix used to collect crossproducts. The problem does not occur if you supply TYPE=CORR data sets to the procedures, rather than original data.

This fix was applied on March 11. You may wish to verify results of runs between November 1, 1985 (when version 5 was installed) and March 11, 1986. For more information, call Gary Wulf at 444-2555.

PRINTER ADDED TO TERM CONTRACT

A high speed, dot matrix printer has been added to the IBM Terminal Term Contract. This printer is an IBM 3287, Model 2, priced at $5,466.00. For more information, call Mary Olson at 444-2861.

FREE MAINFRAME CLASS ON SDSF

A free class on SDSF (Spool Display and Search Facility) will be presented on April 11 from 1:30 pm to 3:30 pm in the ISD Training Center. SDSF is used for checking on the status of jobs and to view job output. For more information, call Gary Wulf at 444-2555 or Randy Holm at 444-2824.

MICROCOMPUTER SECTION

SOFTWARE IS NOW AVAILABLE FROM PROPERTY AND SUPPLY

The Information Center is no longer selling microcomputer software. The Department of Administration has transferred the sale of the following software to Central Stores, Property and Supply Bureau. Prices are the same as at ISD and support continues to be available from the Information Center. Property and Supply is located at 930 E. Lyndale Avenue, Helena, Montana.

Crosstalk XVI - asynchronous communications package
WordPerfect Version 4.1 - word processing package
PFS:File and Report - file management system
LOTUS 1-2-3 Release 2 - spreadsheet package
LOTUS 1-2-3 Upgrade Packages

Note: Displaywrite 3 and PC-DOS are available from IBM.

Support available from the Information Center includes:
    Installation on request
    Demonstrations
    Staff members are available to answer technical questions and assist in problem resolution.
    Training is provided through the ISD training program.

MICROCOMPUTER SUPPORT

The Information Center has three new microcomputer specialists: Ron Heilman (444-2924) is a microcomputer specialist and Sheila Morasko (444-2974) and a new employee, Brett McAlister (444-2044) are microcomputer support specialists. They are available to answer technical questions, assist with problems and teach classes.

LOTUS 1-2-3 USER GROUP

The LOTUS 1-2-3 user group will meet on April 14 in Room 160 (Purchasing Conference Room) of the Mitchell Building at 1:00 pm. This meeting is an informal gathering to share ideas and tips on using LOTUS 1-2-3. Anyone interested may attend. Call Ron Heilman at 444-2924 for more information.

IBM TOKEN RING NETWORK ADAPTER ADDED TO TERM CONTRACT

The IBM Token Ring Network Adapter (Feature Code 3391) has been added to the IBM Microcomputer Term Contract. Term Contract Price is $458.04 and Upgrade Price is $486.50. For more information, call Mary Olson at 444-2861.

Note: Formatting a used diskette erases the information stored on that diskette. Beware!

GENERAL NEWS

THE INFORMATION CENTER EXPANDS

Text Processing (Jeanette Rushford, Mel Liston, and Sandi Coyle) has joined the Information Center Bureau. They will still provide the support and services that have been done in the past and also be expanding their services into new office automation areas.

INFORMATION CENTER STAFF MOVES

The Information Center is now located in Room 24 in the Mitchell Building. Phone numbers for Information Center Support are as follows:

Training:	444-2856
Microcomputers:	444-2924
Mainframe:	444-2555
Text processing:	444-2858
Public System Access:	444-3994
Information Center:	444-2973

Stop in and see our new facility.

NEW TRAINING FACILITY

Information Services Division's Training Facility has moved to Room 25 in the basement of the Mitchell Building. The facility is equipped with 5 PC's and/or 4 terminals, and the video projector. All classes taught by ISD are being taught in Room 25.

INCREASING YOUR COMPUTER VOCABULARY

Microcomputer Terms
Terminal Emulation
Having a PC act as if it were a particular brand and model of terminal for the purpose of communicating with a remote computer or communications network. Many communications programs include a mode to imitate one or more of the most popular terminals. It is usually easier to have the PC imitate the needed terminal than attempt to change the big computer.

BUS
A wire or a cable that acts as a path for electrical signals. Contrast with data channel.

Mainframe Terms
Data Channel
A channel is a special purpose processor in the central computer that controls devices such as disks, tape drives, and printers to the central computer. The channel manages the transfer of information between the central computer and these devices. The central computer can then process other work after it has directed the channel to manage the much slower devices. The central computer will resume its original processing while the channel is completing the transfer of information. These channels transfer data at rates of one and a half megabytes per second up to three megabytes per second.

DASD
Direct Access Storage Devices. A storage device that acts like a huge floppy diskette. DASD on the mainframe is configured to operate over multiple data channels so that when one channel is down, data can be retrieved via other channels. The 4381 has 6 channels and the 3081 has 24 channels.

3270
IBM's designation for a series of terminals, printers, and data communications controllers used on large mainframe computers.

COMPUTER TRIVIA
When was the first microprocessor introduced?

The microprocessor began as a novel solution to a common problem. In 1969, a Japanese company asked Intel to design a set of chips for a family of electronic calculators. Intel's design team didn't have time to create five custom chips. Ted Hoff, the engineer in charge of the project, had a better idea. In place of the chip, he proposed a single general purpose chip that could use a variety of applications. Instead of making the device act like a calculator, he wanted the device to function as a general purpose computer programmed to be a calculator. The result was the world's first computer on a chip--the Intel 4004 microprocessor.[1]

Refer to last month's News and Views for a definition of microprocessor.

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[1]This information is from an article titled The Making of a Microprocessor by Donald B. Trivette in the March issue of Lotus Magazine.

TRAINING SCHEDULE

MAINFRAME CLASSES

BASIC TERMINAL SKILLS (ISD12): presented by Wendy Wheeler of
the Information Center

DATE:	April 30, 1986
	or May 1, 1986
TIME:	8:30 am to 4:00 pm
PLACE:	ISD Education Center, Mitchell Building
COST:	$50.00
LIMIT:	8
PREREQUISITE:	3270nd (interactive class on terminal operation)
CANCELLATION DATE:	April 23, 1986

BASIC TERMINAL SKILLS is a hands-on workshop to provide experience using computer terminals and the SPF editor. The SPF editor is an easy-to-learn menu used to enter data and programs into the State of Montana central computer system. Entering data, changing data and submitting programs for execution are covered in detail. Also covered are SPF's utility functions and how to track job output.

This course is essential for state government personnel using terminals tied into the State of Montana central computer. This course is a prerequisite for many other ISD classes.

INTRODUCTION TO JCL (ISD41): presented by Randy Holm of the Information Center

DATE:	May 5 - May 9, 1986
TIME:	9:00 am to 4:00 pm each day
PLACE:	ISD Education Center, Mitchell Building
COST:	$150.00
LIMIT:	8
PREREQUISITE:	Basic Terminal Skills (ISD12)
CANCELLATION DATE:	April 28, 1986

This course is designed for programmers, I/O controllers, operations technicians or users of report-writing software who submit jobs on ISD's system. This course will cover:
    Syntax and coding of IBM Job Control Language (JCL)
    MVS operating system
    How to handle datasets and device assignments
    Some of the IBM utilities
    Troubleshooting and interpreting system messages
    Hands-on experience writing and executing JCL

CONVERSION FROM MEGACALC TO LOTUS 1-2-3: presented by Gary Wulf and Randy Holm of the Information Center

DATE:	April 24, 1986
TIME:	8:30 am - 12:00 noon
PLACE:	ISD Education Center, Mitchell Building
COST:	free
LIMIT:	8
PREREQUISITE:	Lotus 1-2-3 experience and a Megacalc spreadsheet to convert
CANCELLATION DATE:	April 17, 1986

This class is for Megacalc users who will be converting Megacalc spreadsheets to a PC-based spreadsheet using Lotus 1-2-3. Lotus 1-2-3 is supported by the Information Center and a procedure for the conversion has been developed. Most of the formulas will convert.

If your Megacalc spreadsheet is very large, users should be aware of a possible need for extended memory. Please contact the Information Center (444-2973) if you have questions about size.

MICROCOMPUTER CLASSES

BEGINNING MICROCOMPUTER SKILLS (OA02): presented by the staff of the Information Center

DATE:	June 9, 1986
	or June 10, 1986
TIME:	8:15 a.m. to 4:30 p.m.
PLACE:	ISD Education Center, Mitchell Building
COST:	$50.00
LIMIT:	10
PREREQUISITE:	None
CANCELLATION DATE:	June 2, 1986

This course will give participants brief hands-on experience with microcomputers. Topics to be covered:

    The machine
    The operating system
    Word processing
    Spreadsheets and graphics
    File management
    Communications

All class time will be spent using microcomputers and software. The participant will learn what microcomputers can do and how to approach them with a positive attitude. This course or its equivalent is a prerequisite for other micro-computer courses.

INTRODUCTION TO LOTUS 1-2-3 (OA12): presented by Wendy Wheeler of the Information Center

Beginning in May, the format of the **Introduction to Lotus 1-2-3** class will be changing. The class is being expanded to one full day and one half day. Please check these dates carefully.

DATES:	Class 1: May 14 **and** May 16, 1986
	Class 2: May 22 **and** May 23, 1986
TIME:	Class 1: 8:30 am to 3:30 pm **first day**
	1:15 pm to 4:00 pm **second day**
	Class 2: 8:30 am to 3:30 pm **first day**
	8:30 am to 11:00 am **second day**
PLACE:	ISD Education Center, Mitchell Building
COST:	$75.00
LIMIT:	10
PREREQUISITE:	Beginning Microcomputer Skills (OA02)
CANCELLATION DATE:	Class 1: May 7, 1986
	Class 2: May 14, 1986

This course is designed for anyone with little or no previous 1-2-3 or microcomputing experience.

INTRODUCTION TO LOTUS 1-2-3 will concentrate on 1-2-3 spread-sheet design and commands and the creation of graphics. Printing spreadsheets and graphs is also covered. The more advanced features such as macro programming and database commands are covered in the advanced course.

Class format consists of lecture and hands-on practice followed by lab time on actual agency spreadsheets for further experi-ence.

SPREADSHEET DESIGN AND DOCUMENTATION (OA23): presented by Ron Heilman of the Information Center

DATE:	April 17, 1986
TIME:	8:30 am to 4:30 pm
PLACE:	ISD Education Center, Mitchell Building
COST:	$50.00
LIMIT:	8
PREREQUISITE:	Introduction to Lotus 1-2-3 (OA02)
CANCELLATION DATE:	April 10, 1986

This class will emphasize the importance, effectiveness and the organizational benefits of good spreadsheet design and documentation. The Lotus 1-2-3 spreadsheet program will be used to demonstrate good and bad techniques. Some methods to track down common mistakes and logic problems will be covered.

Students should have previous spreadsheet experience. A general knowledge spreadsheet applications and concepts is required. Minimum requirements can be met by completing the "Introduction to Lotus 1-2-3" class. Students are not required to be 1-2-3 users, however, if this is the case, or if you are not sure if you meet the minimum requirements, please call Ron at 444-2924.

ADVANCED FEATURES OF LOTUS 1-2-3 (OA21): presented by Ron Heilman of the Information Center

DATE:	April 21 and April 22, 1986
TIME:	8:30 am to 4:30 pm on April 21 and one LAB
	LAB 1: 8:30 am to 12 noon on April 22
	LAB 2: 1:00 pm to 4:30 pm on April 22
PLACE:	ISD Education Center, Mitchell Building
COST:	$75.00
LIMIT:	10
PREREQUISITE:	Introduction to Lotus 1-2-3 and Beginning Microcomputer Skills
CANCELLATION DATE:	April 14, 1986

This course is designed for those who are very proficient using the basic spreadsheet and graph functions of 1-2-3. Generally, this is achieved during 3 months of developing progressively more difficult worksheets. Features not covered in the introductory class will be included (ex: protection status, range names, combining files, etc). Advanced features such as one and two-way sensitivity analysis tables and database commands will be covered in detail.

Macro programming will be covered in a separate class on May 15, see this schedule.

Class consists of lecture, hands-on practice and a half day of lab work.

INTRODUCTION TO WORDPERFECT (OA18): presented by Sheila Morasko of the Information Center

DATE:	April 28 and 29, 1986
TIME:	8:30 am to 3:00 pm on April 28
	8:30 am to 12:00 noon on April 29
PLACE:	ISD Education Center, Mitchell Building
COST:	$75.00
LIMIT:	10
PREREQUISITE:	Beginning Microcomputer Skills
CANCELLATION DATE:	April 21, 1986

This course is intended for anyone interested in learning the basics of WordPerfect. This class will concentrate on text creation, use of function keys, editing, formatting, printing, filing, and retrieving documents.

ADVANCED FEATURES OF WORDPERFECT (OA20): presented by Sheila Morasko of the Information Center

DATE:	May 19 and 20, 1986
TIME:	8:30 a.m. to 3:00 p.m. on May 19
	8:30 a.m. to 12:00 noon on May 20
PLACE:	ISD Education Center, Mitchell Building
COST:	$75.00
LIMIT:	10
PREREQUISITE:	Beginning Microcomputer Skills (OA02) and Introduction to WordPerfect (OA18)
CANCELLATION DATE:	May 12, 1986

For those already using WordPerfect, the advanced class will cover headers, footers, footnotes, macro programming, merging, page numbering and spelling checks.

FUNDAMENTALS OF DOS (OA03): presented by Sheila Morasko of the Information Center

DATE:	May 15 and May 16, 1986
TIME:	8:30 a.m. to 12:00 noon each day
PLACE:	ISD Education Center, Mitchell Building
COST:	$75.00
LIMIT:	10
PREREQUISITE:	Beginning Micro Skills and/or 3 months micro experience
CANCELLATION DATE:	May 8, 1986

FUNDAMENTALS OF DOS is intended for microcomputer users who need to know more about controlling their microcomputer through its operating system. This is an introductory course and programming experience is NOT required.

Topics to be covered include:
  What is DOS? Why is it necessary to know about it?
  DOS names for peripherals
  File naming
  Special files like CONFIG.SYS
  Internal commands - DIR, ERASE, RENAME, TYPE, COPY and
      their variations
  External commands - FORMAT, SYS, DISKCOPY, CHKDSK, MODE
  How to interpret batch files
  Backup procedures

CROSSTALK XVI (OA25):   presented by the staff of the Informa-
                        tion Center

DATE: April 25, 1986
TIME: 8:30 am to 4:30 pm
PLACE: ISD   Education   Center,   Mitchell
                        Building
COST: $50.00
LIMIT: 8
PREREQUISITE: Beginning   Microcomputer   Skills
                        (OA02)
CANCELLATION DATE: April 18, 1986

Crosstalk XVI is a microcomputer communications software
package. This course is designed to familiarize the user
with asynchronous communications using a microcomputer and
this software. It explores what can and cannot be done and
how it is done. It will also teach the user how to use and
configure Crosstalk XVI for communicating with remote
computers. Most features of Crosstalk XVI (with the major
exception of the script file command language) will be
covered.

MACRO PROGRAMMING WITH LOTUS 1-2-3:   presented by Wendy
                        Wheeler of the Information Center

DATE: May 15, 1986
TIME: 1:00 pm to 4:30 pm
PLACE: ISD   Education   Center,   Mitchell
                        Building
COST: $35.00
LIMIT: 10
PREREQUISITE: Intro to Lotus (OA12) or equivalent
                        experience
CANCELLATION DATE: May 8, 1986

The macro programming capabilities of 1-2-3 can help you
automate 1-2-3 tasks, saving time and keystrokes. A macro is
a sequence of keystrokes and commands stored in your work-
sheet for execution when desired.

This class is for 1-2-3 uses who have no previous macro
experience. Through lecture, video and hands-on practice,
participants will learn to write and document timesaving
macros.

ISD ENROLLMENT APPLICATION
(FOR ALL COURSES)

PLEASE COMPLETE THE FOLLOWING APPLICATION AND RETURN
TO INFORMATION SERVICES DIVISION

COURSE: _____

DATE: _____

STUDENT: _____

AGENCY/DIVISION: _____

MAILING ADDRESS: _____

_____

PHONE: _____

ISD BILLING NUMBER: _____

SOC SEC NO (FOR P/P/P): _____

AUTHORIZED SIGNATURE: _____

HAVE YOU MET THE PREREQUISITES FOR THIS COURSE? PLEASE
EXPLAIN GIVING JOB EXPERIENCE OR CLASS WHEN APPLICABLE

_____

___ _____

_____